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APPLICATION NO. ATTORNEY DOCKET NO. FILING DATE CONFIRMATION NO. FIRST NAMED INVENTOR 10/766,558 Harold W. Howe 01/26/2004 4053 04-0126-HOWE **EXAMINER** 26357 7590 02/22/2006 ROBERT M. HUNTER PLLC COOLEY, CHARLES E P.O. BOX 2709 **ART UNIT** PAPER NUMBER KAMUELA, HI 96743 1723

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/766,558	HOWE ET AL.	
	Examiner	Art Unit	
	Charles E. Cooley	1723	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address	••
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.15 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period value of the reply within the set or extended period for reply will, by statute any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tire will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communic D (35 U.S.C. § 133).	·
Status			
1) Responsive to communication(s) filed on			
	 action is non-final.		
3)☐ Since this application is in condition for allowar		secution as to the morit	te ie
closed in accordance with the practice under E			.5 15
closed in accordance with the practice under 2	x parte Quayle, 1955 C.D. 11, 4	00 0.0. 210.	
Disposition of Claims			
4) Claim(s) 1-45 is/are pending in the application.			
4a) Of the above claim(s) is/are withdraw	vn from consideration.		
5) Claim(s) is/are allowed.			
6) Claim(s) is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) <u>1-45</u> are subject to restriction and/or e	election requirement.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10) The drawing(s) filed on is/are: a) acce		Examiner.	
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct	•	` '	21(d).
11) The oath or declaration is objected to by the Ex			
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	priority under 35 H.S.C. & 119(a)	1-(d) or (f)	
a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 33 0.3.0. § 119(a)	(1).	
1. Certified copies of the priority documents have been received.			
2. Certified copies of the priority documents have been received.			
3. Copies of the certified copies of the priority documents have been received in this National Stage			
application from the International Bureau (PCT Rule 17.2(a)).			
	`	.d	
* See the attached detailed Office action for a list	or the certified copies not receive	ca.	
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail Da		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	promise in the contract of the	atent Application (PTO-152)	
Paper No(s)/Mail Date	6) Other:	,	

DETAILED ACTION

Election/Restriction Requirement

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-30, 34, 36, 38, 40, 42, and 44, drawn to apparatus, classified in class 366, subclass 128.
 - II. Claims 31-33, 35, 37, 39, 41, 43, and 45, drawn to methods, classified in class 366, subclasses 208 or 348.
- 2. The inventions are distinct, each from the other because of the following reasons:
- 3. Inventions II and I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the process as claimed can be practiced by another and materially different apparatus such as by an apparatus lacking a base, the specified drive or rotating means, or the multiple masses OR the apparatus as claimed can be used to practice another and materially different process such as settling particulate or powder material in flexible sacks (e.g., see U.S. Patent Nos. 3,749,142 and 3,115,905).
- 4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification and the inventions each require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Art Unit: 1723

5. This application also contains apparatus claims directed to the following patentably distinct species:

Species A: Figures 1-6;

Species B: Figure 7;

Species C: Figure 8;

Species D: Figure 9; and

Species E: Figs. 12-19.

- 6. The species are independent or distinct because they are drawn to various embodiments or variants of the invention that gives rise to a burdensome search and examination. Upon election of the apparatus claims (Group I), Applicant is required under 35 U.S.C. 121 to elect a single disclosed species (one of Species A through E) for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no apparatus claim appears to be generic to each of the species.
- 7. This application also contains method claims directed to the following patentably distinct species:

Species AA: (general mixing of a composition - see claims 31 and 32);

Species BB: (micromixing with bubbles - see claim 35);

Species CC: (separation of a solid and liquid - see claim 37);

Species DD: (heat and mass transfer of reactants - see claim 39);

Species EE: (increasing the rate of intrusion of fluid into a porous solid

media - see claim 41);

Art Unit: 1723

Species FF: (low shear mixing of a biological culture and microorganism - see claim 43); and

Species GG: (subjecting a solid into a liquid via acoustic energy).

- 8. These species are independent or distinct because they are drawn to various and divergent methods of processing substances that gives rise to a burdensome search and examination. Upon election of the method claims (Group II), Applicant is required under 35 U.S.C. 121 to elect a single disclosed species (one of Species AA through GG) for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears to be generic to each of the species.
- 9. Therefore, a proper response to this requirement will be the election of either Group I or Group II and the election of a respective species from either Group (one of Species A through E if the apparatus claims of Group I are elected) and (one of Species AA through GG if the method claims of Group II are elected). A listing of claims readable on the elected Group and elected Species is required with the nonelected claims showing the status identifier (withdrawn) see 37 CFR 1.121.
- 10. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Art Unit: 1723

- 11. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

 MPEP § 809.02(a).
- 12. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.
- 13. The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.
- 14. Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
- 15. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Page 6

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Cooley whose telephone number is (571) 272-1139. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles E. Cooley Primary Examiner Art Unit 1723

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